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(54) **NEUROTOXINS EXHIBITING SHORTENED BIOLOGICAL ACTIVITY**(71) Applicant: **MERZ PHARMA GmbH & CO. KGaA**, Frankfurt am Main (DE)(72) Inventors: **Fred Hofmann**, Potsdam (DE); **Jurgen Frevert**, Berlin (DE)(73) Assignee: **MERZ PHARMA GmbH & CO. KGaA**, Frankfurt am Main (DE)

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(58) **Field of Classification Search**

CPC combination set(s) only.

See application file for complete search history.

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(57) **ABSTRACT**

The present invention relates to the pharmaceutical field. Specifically, it contemplates a polynucleotide encoding a Neurotoxin polypeptide exhibiting a reduced duration of biological effect in a subject, wherein the polypeptide comprises at least one degradation signal in the light chain as well as vectors and host cells comprising the polynucleotide, polypeptides encoded thereby and antibodies specifically binding to the polypeptides. Moreover, the invention relates to medicaments comprising the polynucleotides and polypeptides as well as specific therapeutic applications thereof. Furthermore, the present invention contemplates methods for the manufacture of the polypeptides and medicaments.